CELESTE C. GRYNBERG

IBLA 87-309 Decided February 7, 1989

Appeal from a decision of the Wyoming State Office, Bureau of Land Management, increasing annual rental rate for nonproducing oil and gas lease W-63765.

Affirmed.

1. Oil and Gas Leases: Known Geologic Structure--Oil and Gas Leases: Rentals

   Where appellant's lease contains provision for increase of rental rate upon reclassification of her leasehold, or any part thereof, within a known geologic structure, both lessor and lessee are bound by the terms of the lease.

2. Evidence: Generally--Oil and Gas Leases: Known Geologic Structure--Oil and Gas Leases: Noncompetitive Leases--Rules of Practice: Appeals: Burden of Proof

   A holder of a noncompetitive oil and gas lease who challenges a determination that certain lands are within the known geologic structure of a producing oil or gas field has the burden of establishing that the determination is in error. Where the record establishes that the Secretary's technical expert has made a reasoned analysis of the available geological data, the Secretary is entitled to rely upon his expert's professional opinion, absent a showing of error by a preponderance of the evidence.

APPEARANCES: Celeste C. Grynberg, Denver, Colorado, pro se; Lowell L. Madsen, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Denver, Colorado, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE ARNESS

Celeste C. Grynberg has appealed from a decision of the Wyoming State Office, Bureau of Land Management (BLM), dated November 18, 1986, increasing annual rental from $1 to $2 per acre for noncompetitive oil and gas lease W-63765. By assignment approved by BLM on March 1, 1980, appellant acquired record title on November 15, 1979, from Jack J. Grynberg, who leased the 39.63 acres from BLM on July 1, 1978. The lease encompasses lands located at lot 2, NE^ SW^, sec. 31, T. 57 N., R. 98 W., sixth principal meridian,

Park County, Wyoming. In its decision, BLM notified appellant that the basis for the rental increase was a reclassification of the leased lands within the Little Polecat Known Geological Structure (KGS), effective July 22, 1986.

By memorandum dated August 19, 1986, the District Manager, Worland District Office, informed the Wyoming State Director that the basis for the reclassification of lands including appellant's lease W-63765 within the KGS was "a geologic study presented in the KGS Geologic Report."

Included with the memorandum was a geologic review made by BLM geologist Lee H. Jefferis. In conducting his review, Jefferis prepared a map showing well locations in the Little Polecat Field, a well inventory, a structure contour map of the Little Polecat KGS showing the July 22, 1986, KGS addition, and an index map of the Bighorn Basin, Mowry datum. A type log of the Little Polecat KGS was also provided. Jefferis concluded that the boundary of the Little Polecat KGS should be expanded to include an additional 79.63 acres. Jefferis' report expanding the KGS boundary was reviewed by appropriate BLM personnel prior to notification of the appellant; by memorandum dated August 19, 1986, the reviewer found that "the geologic basis and the resulting KGS boundary is reasonable and supportable."

Appellant charges in her statement of reasons (SOR) 1/ that Jefferis has erred in his conclusion that the Grynberg lease acreage should be included in the Little Polecat KGS. Appellant has provided her own analysis; including a structure contour map, July 1986 Wyoming production reports for Little Polecat wells, a Petroleum Information Corporation report on an offset to the Ohio #l Transark well drilled to the Peay zone (Frontier) in 1984, and an electrical log for the Ohio #1 Transark well. Appellant further charges that the increase in rental rate is a breach of the contractual agreement between Jack Grynberg and BLM.

[1] We find no merit to appellant's assertion that the KGS reclassification is violative of the lease agreement. Although it specifies on its face that "[t]he lands in offer were not within a known geologic structure on June 15, 1978," the lease contemplates a rental increase if, during the lease term, the lands are found to be wholly or partially within a known geologic structure. Section 2 (d)(1) of the lease terms provides, in pertinent part:

> [The lessee agrees] * * * [t]o pay rentals and royalties in amounts or value of production removed or sold from the leased lands as follows:

1/ Appellant filed a "Notice of Appeal and Reasons for Appeal" with the Wyoming State Director on Dec. 23, 1986. Appellant's "Revised Reasons for Appeal" was filed on Jan. 22, 1987. The latter document is construed to be her "Statement of Reasons," filed in compliance with 43 CFR 4.412. BLM's Answer, together with a reply geologic report were received by this Board on Mar. 5, 1987.

Rentals.--To pay the lessor in advance an annual rental at the following rates:

(a) If the lands are wholly outside the known geologic structure of a producing oil or gas field:

(i) For each lease year a rental of $1.00 per acre or fraction of an acre.

(b) If the lands are wholly or partly within the known geologic structure of a producing oil or gas field:

(i) Beginning with the first lease year after 30 days' notice that all or part of the land is included in such a structure and for each year thereafter, prior to a discovery of oil or gas on the lands leased, $2 per acre or fraction of an acre. [Emphasis added.]

This language is essentially identical with language found at 43 CFR 3103.3-2 (1978) pertaining to rental payments for noncompetitive leases. 2/ The lease provides that

> [t]his oil and gas lease is issued for a period of ten (10) years to the above-named lessee pursuant and subject to the provisions of the Mineral Leasing Act and subject to all rules and regulations of the Secretary of the Interior now or hereafter in force, when not inconsistent with any express and specific provisions herein, which are made a part hereof. [Emphasis added.]

Regulations in effect at the time appellant's noncompetitive lease was issued contemplate that a lessor will be required to pay $2 per acre to maintain the lease beginning with the first advance rental payment due after 30-days' notice has been given that the land under lease, or any part thereof, has been designated as part of a known geologic structure, and is not otherwise disqualified. 3/ That the lease specifies the rental rates

2/ 43 CFR 3103.3-2 (1978) provides, in pertinent part:

"Rentals shall be payable in advance at the following rates:

* * * * * * *

"(b) On leases wholly or partly within the known geologic structure of a producing oil gas field:

"(1) If issued noncompetitively under section 17 of the act, and not committed to a cooperative or unit plan which includes a well capable of producing oil or gas and contains a general provision for allocation of production, beginning with the first lease year after the expiration of thirty days' notice to the lessee that all or part of the land is included in such a structure and for each year thereafter prior to a discovery of oil or gas on the leased lands, rental of $2 per acre or fraction thereof."

3/ If the lease has been committed to a cooperative or unit plan which includes a well capable of producing oil or gas and which contains a general provision for allocation of production, under the provisions of 43 CFR 3103.3-2 (1978), the $2 rental rate would apply only to portions of the leasehold not so committed. 43 CFR 3103.3-2(b)(2) (1978).

set forth at 43 CFR 3103.3-2 (1978) does not prohibit BLM from reclassifying the leasehold as part of a KGS; rather, it sets forth the specific rate scheme to be applied to this lessor in the event her leasehold is determined to be part of a KGS. Appellant thus receives the protection of the rental rate scheme set forth in her lease, and is shielded from rate schemes adopted by later regulations which may be inconsistent with the terms of her lease. It is well established that when BLM has determined that any part of the lands described in a noncompetitive oil and gas lease is within an addition to a KGS, the lessee is properly required by BLM to pay an increased annual rental of $2 per acre for the entire leasehold. Lewis & Clark Exploration Co., 97 IBLA 171 (1987).

Having determined that the provisions of appellant's lease do not prohibit BLM from characterizing her leasehold as partially or wholly within a known geologic structure, we now turn to appellant's contention that BLM's geological analysis which resulted in the classification of her leasehold within the Little Polecat KGS is in error.

[2] According to Jefferis, the Little Polecat KGS is a small oil and gas field located 10 miles north of Powell, Wyoming, and 7 miles south of the Montana border. Little Polecat is part of the northern Bighorn Basin, and is surrounded by four giant fields--Frannie, Elk Basin, Garland, and Byron--which have combined production approximating 800 million barrels of oil.

A KGS is defined as "technically the trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.5(1). A KGS designation recognizes the existence of a continuous entrapping structure on some part of which there is production. Lloyd Chemical Sales, Inc., 82 IBLA 29 (1984). The initial boundaries of a KGS are not preclusive of future changes. Robert G. Lynn, 61 IBLA 153 (1982).

As long as it can be determined that the land is "presumptively productive," it is not necessary that there be production within or in the immediate vicinity of land designated as part of the KGS, or that future productivity be guaranteed. R. K. O'Connell, 85 IBLA 29 (1985); Robert G. Lynn, supra. Appellant challenges the extension of the Little Polecat KGS to include her leasehold for the reason that the Little Polecat Field has been depleted, and thus cannot be presumed to be productive.

Subsequent to the discovery of hydrocarbons in 1922 at the site of the Ohio Oil Company No. 1 Transark Well (located in sec. 30, T. 57 N., R. 98 W., Frontier Formation), and the later discovery of oil in the Tensleep Sandstone by Stanolind Oil and Gas Company (in sec. 31, T. 57 N., R. 98 W.), the Little Polecat KGS was established on April 2, 1923. Fourteen wells have been drilled in the Little Polecat to date: six were completed as producers; all but four have been plugged and abandoned. A well inventory provided by Jefferis with his report lists the 14 wells, their locations, when they were spudded, and whether they are currently producing. According to the inventory, the field contains one producing well (the Apollo 17, Well #1); the most recent Tensleep producer was spudded in November 1979 (Apollo 17, Well #5).

The structural map prepared by Jefferis details the trapping mechanism at Little Polecat, which he describes in his geologic report, at page 2, as a "closed, doubly plunging anticline * * * that forms the northern terminus of an elongate anticlinal trend." Jefferis maintains that the principal oil-bearing stratum of the Bighorn Basin, the Tensleep sandstone, over 210 feet thick at Little Polecat, is also the major oil producer for the Little Polecat KGS. According to Jefferis, "the unit occurs at depths of 7000 feet." Its zone of "exploitable porosity" averages 10 percent near the Tensleep-Phosphoria contact. Id. at 1. "Gas production [in the Little Polecat] is chiefly from sands of the Frontier Formation, a sand/shale interval that accumulated in marine and near-shore marine environments." Id. According to Jefferis, the chief pay interval for the recovery of gas is the Peay sandstone member, which is encountered at a depth of 4,500 feet, and has porosities averaging 15 percent.

Jefferis determined the boundary of presumptively productive strata to be coexistent with the boundary formed by the oil/water contact for the Tensleep Sandstone. While limits of the Frontier gas production lay entirely within the existing KGS, Jefferis concluded that the oil/water contact for the Tensleep intersects two 40-acre parcels that have previously not been included in the KGS. One of those parcels is the subject of lease W-63765, held by appellant.

Although appellant does not directly challenge BLM's analysis, she presents her own geologic interpretation of the Little Polecat Field. Appellant agrees with Jefferis that the Little Polecat Field is a "sharply folded anticlinal structure," and that production is from the Tensleep formation (Revised SOR at 1). Appellant claims, however, that

> [t]he structure is probably bounded on the east by a fault which is indicated by the reversal of the surface dips. A minor spray [sic] fault transects the southern limb of the feature just north of the Stanolind #1 Government (SENWSE Sec. 21) and isolating this area from the main portion of the field.

Id. Using production data provided by the Petroleum Information Corporation, appellant argues that "poor pressures from the Peay zone," and significant water encroachment in wells producing from the Tensleep indicates that the "field proper," which includes her leasehold, has been depleted of oil and gas reserves. Appellant argues that the fact that the Stanolind #l well is still producing lends support to her theory that a fault divides the "field proper," including her leasehold, from the productive area.

In his geologic report submitted in reply to appellant's SOR, Jefferis states, at page 1, that "Little Polecat Field is a small oil accumulation with production of only about 600,000 barrels to date, and a history of high water production (over 2.5 million barrels)." Jefferis states that the field is still capable of production, as the Apollo 17 #1 and the Kirkwood #44-31 illustrate, and that shut-in wells Apollo 17 #3 and Apollo 17 #5 are not producing because of low crude oil prices and a high water/oil ratio. Id.

According to the reply report, the trapping mechanism described by appellant is "novel," in that the extension of the "'minor spray [sic] fault'" across the anticline presumes that entrapment occurs by "juxtaposing Tensleep sandstone against Tensleep sandstone," a configuration, according to Jefferis, "not likely to trap an oil accumulation." Further complicating the "probable fault" theory advanced by appellant is the "marked difference in structural features across the 'minor fault': a sharply folded, plunging nose on the southeast abuts a gentle dome on the northwest; the hanging wall and footwall will not fit together after being restored to a pre-faulting position." Id.

While Jefferis opines that Grynberg's theory contains geological anomalies which render it unlikely, he states that the KGS map and the Grynberg map are in agreement that the presumptively productive strata do not include the Ohio #1 Transark well, which is the closest control point to the Grynberg lease. That the Ohio #1 Transark is outside the KGS, however, is not dispositive of the acreage leased by appellant, according to Jefferis, since the Ohio well was found to be outside the boundary mapped as the oil/water contact. Id. at 2.

In his reply report, Jefferis reasserts that the mapped oil/water contact includes portions of the Grynberg acreage. His conclusion remains that the oil/water contact is the boundary of a trapping mechanism inferred from both the presence of wells capable of current production, and from the available geological data which, in his professional opinion, suggest a structural configuration of the Little Polecat anticline as "a northwest trending doubly-plunging anticline that trapped oil within four-way closure along its crest." Id. at 3, 2. He concludes that all of Grynberg's lease "is situated within the area of pours and permeable Tensleep sandstone." Id. at 2.

In order to successfully challenge a KGS determination, an appellant must establish error on the part of BLM by a preponderance of the evidence. Richard E. O'Connell, 98 IBLA 283 (1987); Carolyn J. McCutchin, 93 IBLA 134 (1986); see Bender v. Hodel, 744 F.2d 1424 (10th Cir. 1984). The "preponderance of the evidence" standard has been defined as:

> [Establishing] * * * that something is more likely so than not so; in other words, the "preponderance of the evidence" means such evidence, when considered and compared with that opposed to it, [that] has [the] more convincing force and produces in your [mind the] belief that what is sought to be proved is more likely to be true than not true.

Thunderbird Oil Corp., 91 IBLA 195, 201 (1986), aff'd, sub nom., Planet Corp. v. Hodel, CV No. 86-679 HB (D.N.M. May 6, 1987), quoting South-East Coal Co. v. Consolidation Coal Co., 434 F.2d 767, 778 (6th Cir. 1970).

While appellant has advanced an interpretation of the underlying landscape of the Little Polecat Field which differs significantly from the theory advanced by BLM, we are not convinced that the preponderance of the evidence lies in her favor. Appellant has limited her theory that a fault

separates the productive area of the Little Polecat from her leasehold to a "probable" fault; Jefferis's reply to appellant's geological analysis raises significant questions concerning the likelihood of her theory.

While geological data are subject to differing interpretations, the Secretary is entitled to rely upon the reasoned opinions and conclusions of his technical expert in the field. Champlin Petroleum Co., 86 IBLA 37 (1985). Appellant's challenge to the KGS determination demonstrates a mere difference of opinion, and does not, by the requisite preponderance, establish that BLM erred in its decision to expand the Little Polecat KGS, thereby including appellant's leasehold.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

Franklin D. Arness
Administrative Judge

I concur:

Gail M. Frazier
Administrative Judge